

# Pueblo *exchange*

A Partnership for Safe Chemical Weapons Destruction

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### Winter 2005

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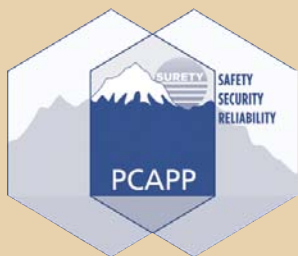
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#### Pueblo Chemical Stockpile Outreach Office

104 West B Street  
Pueblo, CO 81003  
(719) 546-0400  
Hours 8:30 a.m.-5 p.m., M-F  
Other hours by appointment

#### Pueblo Chemical Depot Public Affairs Office

(719) 549-4135



**Pueblo Chemical Agent-  
Destruction Pilot Plant**

[www.pmacwa.army.mil](http://www.pmacwa.army.mil)



*The varied terrain of the U.S. Army Pueblo Chemical Depot supports a variety of plants and animals.*



## Vision for 2005: Positioning for Success in Partnership With Community

By Gary Anderson, ACWA Site Project Manager

What a difference a year makes! By any yardstick, 2004 was a very productive year for PCAPP, despite uncertainties over funding and the long-term schedule.

Twelve months ago, I was still new to Pueblo and was putting together the government's management team for PCAPP. We were just starting to review the Bechtel Pueblo Team's initial design package. The ink was barely dry on our application for a Phase One permit from the State of Colorado, and we had not yet applied for a Certificate of Designation from Pueblo County.

Today, the first two stages of design are finished, and the State of Colorado and Pueblo County have issued permits for Stage One construction. We completed environmental and geological testing at the construction site, and Bechtel is prepared to begin Stage One construction when that work is

authorized and funded.

And those are just the most visible accomplishments. We also reviewed dozens of plans and studies, completed "technical risk reduction" tests for key components of the plant, supported the Office of the Secretary of Defense in an analysis of alternatives, and provided extensive information for an Inspector General audit. During that time, the Bechtel Pueblo Team worked more than one million accident-free hours.

My vision for 2005 is to position the project for success while the Department of Defense and Congress make decisions about funding



Gary Anderson

and the long-term schedule. To accomplish this goal, we will:

- Continue to make safety and environmental protection paramount in everything we do
- Support the Department of Defense in studying options for destroying the Pueblo stockpile
- Complete trade studies of potential cost reduction measures
- Finish final design packages
- Complete Phase Two permitting with the State and County
- Position the project to begin construction should funds be available

I'd like to thank the government and contractor staff for their dedication and hard work. I also thank the citizens of Pueblo County for their involvement and support. We talk about "a partnership in safe chemical weapons destruction," but it's more than just talk. Without that partnership, we would not have made the progress we did in 2004. With that same partnership, I'm confident we will continue moving forward in 2005.

**Pueblo Chemical Stockpile  
Outreach Office**  
104 West B Street  
Pueblo, CO 81003



Pueblo Chemical Agent-  
Destruction Pilot Plant



# Stage One Construction on 90-day Hold While Options Studied

Stage One construction for the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) has been placed on hold by the Department of Defense (DoD) for at least 90 days.

In the meantime, two major studies are in progress to help determine the future of the project:

- DoD is studying options for destroying the Pueblo chemical weapons stockpile, including the possibility of shipping the weapons to another location for destruction.
- The Bechtel Pueblo Team is conducting “trade studies” of ways to optimize plant performance and reduce costs (see adjacent article).

Gary Anderson, Assembled Chemical Weapons Alternatives (ACWA) site project manager, said, “The government notified the Bechtel Pueblo Team on January 13 to cancel all unawarded requests for proposals due to funding constraints and DoD direction to study options for PCAPP. We will work with DoD to complete the transportation studies as quickly as possible and determine our path forward.”

Stage One construction includes roads, fencing, security facilities, earthworks and underground utilities. To support this work, the Bechtel Procurement department has prepared eight construction subcontracts, including:

- Surveying
- Soil and concrete testing
- Fencing
- Site preparation and access road
- Access control point
- Underground utilities
- Warehouse construction
- Construction certification services

These requests for proposals can be re-issued should authorization and funding become available.

## Trade Studies to Evaluate Cost Savings

The Bechtel Pueblo Team is conducting a series of “trade studies” to examine design alternatives that could reduce project costs.

Using the existing plant design as a starting point, a team led by Bechtel’s Paul Henry will examine a series of potential changes to equipment and operations that could reduce capital cost, operating cost or both.

Areas to be studied include:

- **Off-Site Shipment of Uncontaminated Secondary Wastes** — Evaluate the cost and schedule impacts of shipping the uncontaminated dunnage (including pallets, strapping, containers, packaging waste, etc.) off-site rather than processing at PCAPP.
- **Off-Site Shipment of Uncontaminated Propellant, Fuses, Cartridges, etc.** — Evaluate the cost and schedule impacts of shipping uncontaminated and stable propellant-related items off-site rather than neutralizing them.
- **Reduce Energetics Neutralization Reactor to Two Holding Tanks** — The existing design includes four “Energetics Neutralization Reactors,” large metal tanks in which the hydrolysate from neutralizing the explosive materials will be treated. Two

holding tanks and a 30-day storage tank are also used. This study will re-examine the total number of tanks required to hydrolyze the energetics, sample and then transfer the energetics hydrolysate to the bioreactor system.

- **Optimize Agent Neutralization Reactors and Tankage** — Study using two larger agent neutralization reactors instead of the current four.
- **Optimize Space in Munitions Wash Station Areas** — Study reducing floor space for the Munitions Wash Station.
- **Eliminate Hydrolysate Cooling System** — Evaluate the need to cool agent hydrolysate prior to it being released from the Agent Processing Building.
- **Eliminate Forklift Operations** — In the current design, munitions are transported by an automatic guided vehicle (AGV) into a monitoring station, and forklifts then move them to the Agent Processing Building. This study will examine eliminating the forklift operations and using AGVs all the way.
- **Replace Induction Heating with Resistance Heating for the Continuous**



Discussing PCAPP trade studies are, from left, Deb Mock, Paul Henry, and Mike Lewis of Bechtel; and Gary Anderson, ACWA site project manager.

**Steam Treater and Metal Parts Treater systems** — Changing the type of heater could reduce capital costs and electricity costs.

- **Cascading Off-Gas Treatment System (OTS) Condensates** — In the current design, condensate from the Continuous Steam Treater and the Metal Parts Treater is held in storage tanks to be sampled for the presence of mustard agent before the gases can be released from engineering controls. This study will evaluate alternate ways to configure the off-gas treatment system and to treat the condensate.

The team held a kick-off meeting in mid-January and plans to have reports completed in April.

## Project Provides Variety of Lessons for Students and Teachers

The PCAPP educational outreach program is somewhat like the blind men describing an elephant. Each person has a different perspective, depending on what he or she touches.

At Pueblo West High School, history teacher Michelle Ericksin sees a way to make a local connection in a unit on World War One.

Jeanna Milisavljevich, fifth-grade teacher at Carlile Elementary, uses the chemical demilitarization program to weave together science, history, current events and sustainable development.

At Swallows Charter Academy, history, math, language arts and science teachers are jointly developing a series of lessons that involve the theme of chemical weapons. To date their lessons have focused on history, and future sessions will include chemistry, biology and math. In the math classes, students will use demographic information from Bechtel's sustainable development program as they work with statistics and analyze world trends.

At South High School, almost the whole faculty is evaluating ways to incorporate the PCAPP project into their curriculum. For example, language arts teacher Sue Applbaum is building an entire unit around the book "All

Quiet On The Western Front."

Under the direction of Cindy Elm-Sinn of the PCAPP Outreach Office, the educational program has reached more than 700 students in elementary, middle, and high schools throughout Pueblo County in recent months. At least 25 more sessions are scheduled in coming months.

Elm-Sinn works with teachers and administrators to use PCAPP as a vehicle to bring a local, real-life example to the curriculum. "During November and December, many of the high school history classes were studying World War One. This provided an opportunity to describe Germany's use of chemical weapons during that war, and trace the development of chemical weapons over the years," Elm-Sinn says.

Darren Tallent, a local history buff who has a collection of World War One artifacts, assists



*Students in civics and history classes at Pueblo West High School study the history of chemical warfare as part of a unit on World War One.*

with some of the presentations.

Teachers who want information about the program can call Cindy Elm-Sinn at (719) 546-0400, or send e-mail to [clemsin@bechtel.com](mailto:clemsin@bechtel.com).



*Lance Tillotson, graphic artist with Signs of The Time, puts the finishing touches on window signs at the new PCAPP Outreach Office.*

## Outreach Office Moves to Historic Pueblo Union Depot Location

The PCAPP Outreach Office moved in December to 104 West B Street, adjacent to the historic Pueblo Union Depot.

"This new location is more accessible to the public and is part of our continuing commitment to full and open communications with the Pueblo community," said Gary Anderson, ACWA site program manager.

Bob Kennemer, Outreach Office manager, said, "Being located in Pueblo's popular historic district provides the opportunity to reach more

people, and the new office includes facilities for small-group meetings to give briefings about the project."

An Open House is being planned for this spring, Kennemer said.

As part of the move, the name of the office was changed from "Pueblo Chemical Depot Community Outreach Office" to "Pueblo Chemical Stockpile Outreach Office" to shorten the name and more accurately reflect the role of the office.

The Outreach Office phone number remains the same at (719) 546-0400.